IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A semiconductor light receiving device, comprising:

a semiconductor substrate;

a light absorbing layer of a first conductivity type formed on a semiconductor surface region of the semiconductor substrate, the light absorbing layer absorbing a light beam including a first wavelength band and a light beam including a second wavelength band having a shorter wavelength than the wavelength of the first wavelength band;

a cap layer of the first conductivity type formed on the light absorbing layer;

a region of a second conductivity type formed in the cap layer to transmit the light beam including the ~~second~~ first wavelength band; and

a light collecting layer formed on the semiconductor surface region adjacently to the cap layer and the light absorbing layer, the light collecting layer having a convex shape with curvature in at least a portion of a surface of the light collecting layer to transmit and collect the light beam including the second wavelength band to the light absorbing layer.

Claim 2 (Original). A semiconductor light receiving device according to claim 1, wherein a portion of the cap layer of the first conductivity type exists between the region of the second conductivity type and the light collecting layer.

Claim 3 (Original). A semiconductor light receiving device according to claim 1, wherein the region of the second conductivity type extends to the light absorbing layer.

Claim 4 (Original). A semiconductor light receiving device according to claim 1,

wherein the cap layer is a InP layer and the light absorbing layer is a InGaAs layer.

Claim 5 (Original). A semiconductor light receiving device according to claim 1, wherein the band gap of the light absorbing layer is larger than the band gap of the cap layer.

Claim 6 (Currently Amended): A semiconductor light receiving device according to claim 1, wherein the light collecting layer is a compound expressed as ~~$Al_xGa_yIn_{1-x-y}As_zP_{1-z}$ $(0=x, y, x+y, z=1)$~~ $Al_xGa_yIn_{1-x-y}As_zP_{1-z}$ $(0\leq x, y, x+y, z\leq 1)$.

Claim 7 (Original). A semiconductor light receiving device according to claim 1, wherein an intermediate layer is formed between the semiconductor surface region and the light collecting layer, the intermediate layer having a lattice constant between a lattice constant of the semiconductor surface region and a lattice constant of the light collecting layer.

Claim 8 (Original). A semiconductor light receiving device according to claim 1, wherein the light collecting layer includes a first portion adjacent to the semiconductor surface region and a second portion apart from the semiconductor surface region, the first portion having a lattice constant between a lattice constant of the semiconductor surface region and a lattice constant of the second portion of the light collecting layer.

Claim 9 (Currently Amended): A method of fabricating a semiconductor light receiving device, comprising:

forming a light absorbing layer of a first conductivity type on a semiconductor surface region of a semiconductor substrate, the light absorbing layer absorbing a light beam including a first wavelength band and a light beam including a second wavelength band having a shorter wavelength than the wavelength of the first wavelength band;

forming a cap layer of the first conductivity type on the light absorbing layer;

forming a semiconductor layer on the semiconductor surface region of the semiconductor substrate adjacently to the cap layer and the light absorbing layer, the semiconductor layer transmitting the light beam including the ~~second~~ first wavelength band;

forming a region of a second conductivity type in the cap layer by introducing impurities giving the second conductivity type into the cap layer;

forming a light collecting layer by processing a semiconductor layer to form a convex shape with curvature in at least a portion of a surface of the light collecting layer to transmit and collect the light beam including the second wavelength band to the light absorbing layer.

Claim 10 (Original). A method of fabricating a semiconductor light receiving device according to claim 9, further comprising:

forming a first light reflection preventing film on the region of the second conductivity type;

forming a first electrode to be connected with the region of the second conductivity type;

forming a second electrode on a main surface region of the substrate opposite to another main surface region where the first electrode is formed; and

forming a second light reflection preventing film on the light collecting layer.

Claim 11 (Original). A method of fabricating a semiconductor light receiving device according to claim 9, wherein the region of the second conductivity type is formed so that a portion of the cap layer of the first conductivity type exists between the region of the second conductivity type and the light collecting layer.

Claim 12 (Original). A method of fabricating a semiconductor light receiving device according to claim 9, wherein the region of the second conductivity type is formed to extend to the light absorbing layer.

Claim 13 (Original). A method of fabricating a semiconductor light receiving device according to claim 9, wherein the cap layer is an InP layer, and the light absorbing layer is an InGaAs layer.

Claim 14 (Original). A method of fabricating a semiconductor light receiving device according to claim 9, wherein the light absorbing layer and the cap layer are formed so that the band gap of the light absorbing layer is larger than the band gap of the cap layer.

Claim 15 (Currently Amended): A method of fabricating a semiconductor light receiving device according to claim 9, wherein the light collecting layer is a compound expressed as ~~$Al_xGa_yIn_{1-x-y}As_zP_{1-z}$ $(0=x, y, x+y, z=1)$~~ $Al_xGa_yIn_{1-x-y}As_zP_{1-z}$ $(0\leq x, y, x+y, z\leq 1)$.

Claim 16 (Original). A method of fabricating a semiconductor light receiving device according to claim 9, further comprising:

forming an intermediate layer on the semiconductor surface region before forming the semiconductor layer, the intermediate layer having a lattice constant between a lattice constant of the semiconductor surface region and a lattice constant of the semiconductor layer.

Claim 17 (Original). A method of fabricating a semiconductor light receiving device according to claim 9, wherein the semiconductor layer is formed by changing composite rate of a compound to be formed so that the semiconductor layer includes a first portion adjacent to the semiconductor surface region and a second portion apart from the semiconductor surface region, the first portion having a lattice constant between a lattice constant of the semiconductor surface region and a lattice constant of the second portion of the semiconductor layer.

Claim 18 (Original). A method of fabricating a semiconductor light receiving device according to claim 9, wherein, after forming layers to form the light absorbing layer and the cap layer on an entire surface of the semiconductor surface region, the light absorbing layer and the cap layer are formed by etching the layers selectively.

Claim 19 (Original). A method of fabricating a semiconductor light receiving device according to claim 9, wherein the light absorbing layer and the cap layer are selectively grown on the semiconductor surface region.